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Conference Abstract

Demonstration of Taxonomic Name Data Services through ChecklistBank

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Abstract

ChecklistBank is a publishing platform and open data repository focused on taxonomic and nomenclatural datasets. It was launched at the end of 2020, and is a joint development by Catalogue of Life (COL) and the Global Biodiversity Information Facility (GBIF). Close to 50K datasets, mostly originating from published literature mediated through Plazi's TreatmentBank, Pensoft Publishers and the European Journal of Taxonomy, are openly accessible through ChecklistBank. Data sets also include sources with (Molecular) Operational Taxonomic Units, such as from UNITE / PlutoF, National Center for Biotechnology Information Taxonomy / European Nuclotide Archive, and the International Barcode of Life / BoLD. Next to various taxonomic datasets (also from regional and national levels, e.g., shared through GBIF) and nomenclatural datasets (e.g., Zoobank, International Plant Names Index), ChecklistBank also links out to the various original initiatives websites (e.g., World Register of Marine Species, Integrated Taxonomic Information System, COL China, Species Files).

ChecklistBank also holds all the tooling that is needed to assemble the COL Checklist, the authoritative global species list of all described organisms. The COL Checklist 2023 (Bánki et al. 2023), containing more than 2.1 million accepted species, is assembled from 164 global taxonomic data sources mediated through ChecklistBank. The COL Checklist

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contains name usage identifiers, and each checklist version and its underpinning data sources are issued with digital object identifiers.

After the launching of ChecklistBank, the EU funded Biodiversity Community Integrated Knowledge Library (BiCIKL) project contributed to additional improvements to ChecklistBank. These added functionalities include, amongst others, a name usage search, name match, and a taxonomic data comparison. The tooling used to assemble the COL Checklist has been generalised through a ChecklistBank 'project functionality' supporting the assembly of a species list.

During the demonstration, several of the functionalities, developed in the context of the EU BiCIKL project, will be highlighted.

Keywords

Catalogue of Life (COL), GBIF, BiCIKL, taxonomy, name matching, species list comparison, Plazi, TreatmentBank

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Conflicts of interest

The authors have declared that no competing interests exist.

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